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STUDY PLAN
GEOPHYSICAL SURVEYS
LEES LANE LANDFILL
LOUISVILLE, KENTUCKY
JUNE 21-26, 1982

INTRODUCTION

Ecology and Environment (E & E) personnel will conduct geophysical surveys (resistivity) at Lees Lane Landfill, Louisville, Kentucky during the week of June 21-26, 1982. The purpose of the surveys is to identify the extent of ground-water contamination.

The site is located within the Ohio River Valley Alluvium adjacent to the Ohio River. The landfill was used as disposal for domestic, commercial, and industrial wastes from 1948 to 1975. In 1975 methane gas was detected in basements in nearby Riverside Gardens subdivision. The gas migration problem was alleviated when a gas vent system was installed in 1980.

Sampling at the site has identified both organic and inorganic contaminants. In 1980 analyses of drum waste identified over 50 compounds including phenolic resins, benzene, and relatively high concentrations of copper, cadmium, nickel, lead, and chromium. Ground-water sample analyses in 1981 identified Bis (2-ethylhexyl) phthalate, trichlorofluoromethane, dichlorodifluoromethane, phenol and eleven different metal contaminants.

The exposed drums along the river bank were removed in 1981. All wastes are presently underground.

SCOPE

The scope of work involves conducting resistivity profiles at 45, 60, and 80 feet deep over the site.

OBJECTIVES

The objective of the surveys is to identify the extent of ground-water contamination.

STUDY METHODOLOGY

The resistivity profiles will be conducted at selected locations to a depth of 45, 60, and 80 feet.

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SAFETY

No wastes are exposed at the ground surface, therefore Level D protection is sufficient.

Safety precautions will be instituted at the instruction of the team leader. Any team member may employ additional safety precautions at his/her own discretion. If at any time during the study a team member observes a situation which he/she feels presents an imminent hazard to the team, he/she should signal the other members to evacuate the area. If this occurs, the area is to be evacuated immediately by all team members.

<u>DATE</u>	<u>TASK</u>
June 21, 1982	Travel to Louisville, KY via GSA van
June 22, 1982	Conduct resistivity survey
June 23, 1982	Conduct resistivity survey
June 24, 1982	Conduct resistivity survey
June 25, 1982	Conduct resistivity survey
June 26, 1982	Return to Atlanta

CONTACTS

John Brooks, KYDNREP, Louisville (502) 588-4254
Barry Burrus, KYDNREP, Frankfort (502) 564-6716